



Outreach programs with historically black colleges and universities bring students to the Laboratory.

## SHAPING THE *Laboratory's Future*

For more than 50 years, the Laboratory has provided an environment that attracts a high-quality workforce motivated by "a passion for mission" and dedicated to scientific and technical excellence. Livermore's many accomplishments in 2003 are the products of visionary individuals and exceptional multidisciplinary team efforts. They carry forward a long tradition at the Laboratory—innovations in science and technology and delivery to sponsors of markedly improved capabilities to meet pressing national needs.

Livermore's most valuable asset is its workforce. The Laboratory stays vibrant by continuing to attract an outstanding staff. Strong ties to world-class research universities—in particular, many partnerships with the various campuses of the University of California—serve as a vehicle for bringing to the Laboratory new talent and the latest breakthroughs in science and technology. Livermore's long-standing ties with the University have also fostered a tradition of intellectual independence and integrity as well as a focus on the long-term interests of the nation. Laboratory researchers strive to anticipate future national security needs. Science and technology investments and exploratory research and development efforts are targeted accordingly.

A healthy future also requires that the Laboratory conduct operations in a safe, secure, and efficient manner. Protection of sensitive information, nuclear materials, and other valuable assets is of paramount importance, as are the health and safety of the public and Livermore employees. Contributing to a safe, clean environment is only part of being a good neighbor. The Laboratory and its staff participate in a wide range of civic endeavors and broadly contribute to the University of California's mission of education, research, and public service.



School tours of the Laboratory's Discovery Center are popular events.



Demonstrating Laboratory science during Family Day.

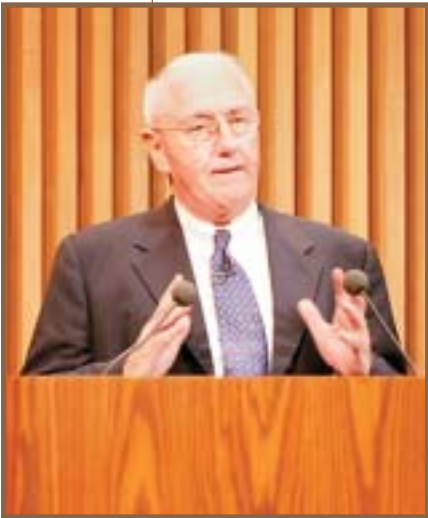


Laboratory employee serving as judge at a local Science Fair.





Robert C. Dynes, President of the University of California (right) with UC Regent John Davies and former President Richard Atkinson.



UC Vice President for Laboratory Management, Retired Admiral S. Robert Foley.

University of California Management Changes and Contract Competition

In June 2003, the University of California (UC) Board of Regents selected Robert C. Dynes to become the 18th president of UC, effective October 1. Soon after Dynes took office, Retired Admiral S. Robert Foley was named UC Vice President for Laboratory Management. Foley, a longtime naval commander and consultant on energy and defense issues, is responsible for the University's management and operation of Berkeley, Livermore, and Los Alamos national laboratories. UC has managed the three laboratories on behalf of the federal government since their inception. The University has provided the stable, special environment that has enabled the laboratories to achieve remarkable scientific advancements and vital contributions to national security.

President Dynes and Admiral Foley assumed leadership at a time when the future of UC's management of the laboratories is uncertain. In April 2003, DOE Secretary Spencer Abraham announced his intention "to open the management of Los Alamos to full competition when the current contract expires." Subsequent congressional legislation required that the contract to manage and operate Lawrence Livermore also be subject to open competition at an as-yet undetermined future date.

Soon after the decision was made to compete the Los Alamos contract, NNSA Administrator Linton Brooks visited Livermore and talked to employees about DOE's decision. Brooks said both he and the Secretary of Energy want UC to join in the competitive process, with Brooks adding "if I get the [bidding] criteria that values science right, I am confident we will get UC or better" to bid. The UC Board of Regents has not made a decision whether to compete for the Livermore and Los Alamos contracts, but the University has taken actions to preserve its options and to continue to prepare as if it will compete. In a visit to Livermore in November 2003, President Dynes and Admiral Foley expressed optimism about UC's continued role in managing the laboratories.

Validation of Laboratory Business Practices and Operations

In January 2003, the Laboratory Director began an examination of key areas of the Laboratory's operations. His goal was to provide reassurance that business policies and practices are sound and to make improvements wherever necessary. In both scientific work and day-to-day operations, Laboratory employees expect to be accountable to high standards. However, events in late 2002 at Los Alamos called into question the standards of business operations at the UC-managed national laboratories.

Laboratory actions included a thorough reanalysis of policies, procedures, and processes; a "wall-to-wall" property inventory; an internal audit of property and procurement systems; and an external third-party review of business systems. These efforts verified that Livermore is following prudent business practices that include appropriate checks and balances. In particular, the external review, conducted by a team from Ernst & Young LLP, provided an independent assessment and operational analysis of select business processes at the Laboratory. Based on two months of observation and operation analysis, the Ernst & Young team validated the existence of appropriate internal controls at Livermore and did not disclose any material weaknesses in this system of controls.

Improving the Workplace and Attention to Staff Needs

Ensuring the continuing vitality of the workforce is a high priority for Laboratory management. In response to staff needs, a wide range of actions are under way to improve the workplace and help employees manage the balance between their jobs and the rest of their lives. These needs were identified in a formal survey conducted for the Laboratory to understand the issues facing employees and to assess their views. Survey Action Teams were formed to recommend improvements in response to survey results, and Laboratory senior management is acting on these recommendations.

Safety First

Environment, safety, and health (ES&H) considerations are an integral part of project planning and work execution at the Laboratory. The health and safety of the public and Livermore employees are of paramount importance—as is environmental quality. The Laboratory sets high expectations for the ES&H performance of employees and has put into place effective systems and procedures, which are continually improved, to ensure that safety standards are met. Livermore's Integrated Safety Management System provides a framework through which safety procedures and practices have markedly improved, just as safety performance has. A notable example is the outstanding safety record compiled by the National Ignition Facility construction project, which has logged more than 3.7 million hours of work without a lost workday accident.



National Ignition Facility workers celebrate their latest safety milestone in 2003.



An employee tests products in the Ergonomic Demo Room.

One result of the survey was the Integrated Pay and Performance Program (IPPP), the largest revision of Livermore's performance appraisal, ranking, and pay system in the last two decades. This new program is a significant step in answering employees' requests for a better system while meeting the needs of management to successfully assess and reward employee contributions. The program is designed to be more consistent and less complex than previous performance management approaches. IPPP links total contribution to Laboratory programs and operations more directly to pay, and it holds management accountable for effective program implementation.

In response to employee input, the Laboratory is providing additional career development and training programs and has instituted flexible work schedule options. Expanded work/life services are also available to employees, ranging from child care to programs for financial and estate planning. One example is the opening of a new Ergonomic Demo Room at the Laboratory. The room is stocked with samples of ergonomic products that employees can select to meet their workplace needs, based on an evaluation by one the Laboratory's ergonomic specialists.

Survey results also pointed out the need for an expanded cafeteria in the growing northeast quadrant of the Laboratory. Construction started on a new Central Café in April 2003, and it opened for business in early 2004. The new café can serve nearly twice the number of daily lunches as the facility it replaces, and it provides marked improvements in operational efficiency and the overall dining atmosphere.

Security Enhancements at the Laboratory

Protection of sensitive information, nuclear materials, and other valuable assets at Livermore is critically important. Since September 2001, the Laboratory has routinely functioned under heightened security levels. An extensive apparatus is in place, and upgrades are continually made to address new threats and concerns. An example is the change to controlled access of a one-mile stretch of East Avenue that runs between Lawrence Livermore and Sandia national laboratories. Implemented in August 2003, this added measure of security had become much more urgent in the wake of 9/11. Planning for and completing the change, which entailed integrating the needs of adjoining landowners, was undertaken with the full cooperation of the City of Livermore and Alameda County.

Earlier in 2003, some security mistakes were made—missing keys and a lost access badge—and they were compounded by management and communication issues in the security department. The Laboratory Director at once made clear to all employees the importance of dealing directly and immediately to fix mistakes and problems that arise. Sustaining public trust in the institution requires Laboratory employees to exercise vigilance to prevent security incidents and to respond appropriately when incidents do occur.

The Director also announced a major reorganization of the Safeguards and Security Department at the Laboratory and selected a new leader for these activities. The new leader first implemented the necessary corrective actions following the security incidents. His Safeguards and Security organization worked closely with external review teams investigating the incidents. He also directed an evaluation of Livermore's security management structure and recommended changes to the Director. The organization's self-improvement efforts—and the professionalism of its staff—greatly contributed to the high marks achieved in a special security review conducted in early 2004 by DOE's Office of Independent Oversight and Performance Assurance. The two areas that were formally rated, cyber security and protective force, received an "Effective Performance" grade, the highest rating the office assigns.

A New Science and Technology Investment Strategy

At the beginning of 2003, the Deputy Director for Science and Technology launched an effort to take a fresh look at Livermore's science and technology (S&T) investment strategy. Outstanding S&T makes it possible for the Laboratory to take on demanding missions and be ready for future national challenges. Sustaining this S&T vitality requires continual reinvestment in research capabilities and facilities, and, above all, in the people who make it possible.

A broad spectrum of Laboratory scientists and engineers participated in the first phase of the planning process, which was completed in 2003. As a result of their work, new initiatives are under way that enhance Livermore's capabilities to carry out current programs, pursue discovery-class science and innovative technologies, and enable future missions of national importance.

The strategy builds on the enormous investments that have been made at Livermore in the National Ignition Facility and

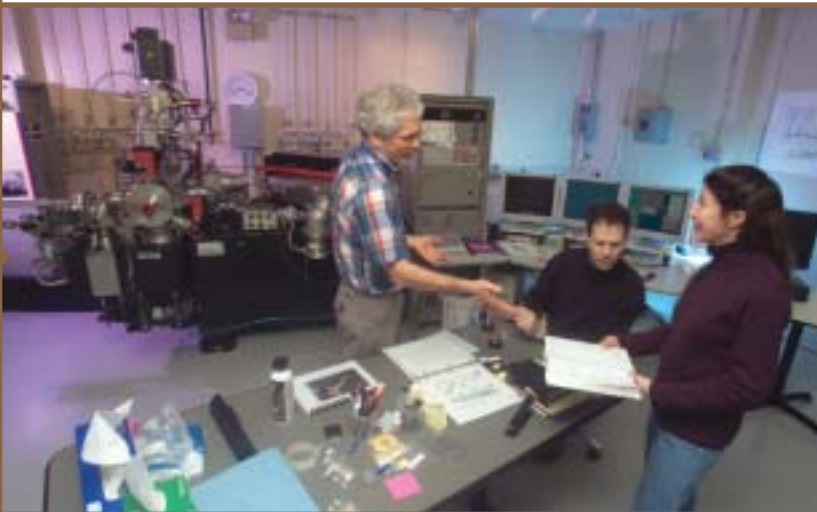


Security police officers train regularly to protect Laboratory personnel and property.



Groundbreaking for the new Central Café.

Additional security measures on East Avenue.



Nano secondary-ion mass spectrometer was one of many recent S&T investments.





Decontamination and Waste Treatment Facility (top) and patented process for encapsulating contaminants from used HEPA filters (bottom).



high-performance scientific computing. It also aims to invigorate the Laboratory's experimental capabilities to meet the growing demand of research programs for data and nanoscale science and engineering. The strategy, which will continue to be revised and updated, recognizes the importance of sustaining an agile and flexible environment for research and development to support emerging national needs.

**A Major New Facility for Waste Management**

Livermore's Decontamination and Waste Treatment Facility (DWTF) began operations in September 2003. DWTF is a new, integrated facility for storing and processing the Laboratory's wastes, whether they be hazardous, low-level radioactive, transuranic radioactive, or mixed (that is, both chemically hazardous and radioactive). The new facility is a complex of buildings that includes new indoor storage areas and a California-permitted treatment plant. A 2,200-square-meter building houses solid-waste processing facilities, and a 1,600-square-meter building is used for liquid waste processing. The centerpiece of the liquid waste processing building is an enormous enclosed "tank farm" with nine 18,000-liter, closed-top tanks.

DWTF greatly enhances the Laboratory's capabilities to provide safe, cost-effective waste operations. The facility is also key to Livermore's efforts to develop and improve ways of managing generated wastes. An example of waste-management improvements is the development by Laboratory researchers of a patented process that encapsulates contaminants in used high-efficiency particulate air (HEPA) filters. The new process is easy to use, safe, and does not generate secondary waste as other processes do. HEPA filters are used at facilities throughout the DOE weapons complex so the potential benefits are significant.

**A Good Neighbor**

More than 180 community guests toured NIF and the DWTF as part of the Laboratory's annual Community Leader Day. It was an opportunity for elected officials, city leaders, school board members, and police and fire officials to learn more about the Laboratory. The Laboratory Director discussed the many ways that

the institution and its employees reach out to the community. One example was the establishment of the Homeland Security Organization to help federal, state, and local officials fight terrorism. At the DWTF, community members learned what waste products are produced and how wastes are handled and treated safely without harming those inside or outside the Laboratory fence.

The Laboratory's annual campaign to Help Others More Effectively (HOME) raised more than \$1.5 million for Bay Area and Central Valley charitable organizations. Livermore employees marked their sixth straight year of record-setting contributions. Through the HOME Campaign, the Laboratory is the largest single workplace supporter of the Tri-Valley Community Fund. The Community Fund is dedicated to raising and distributing local charitable contributions to human service, educational, cultural, and recreational organizations located throughout the Livermore, Amador, and San Ramon valleys in northern California.

Many outreach activities include employee participation in community assistance and economic development organizations. Brighter Holidays is a prime example of employee volunteerism and community outreach. The program, which started in 1989 by helping just a few local Livermore families, served 600 people from 137 families in nine counties in December 2003. The Holiday Card Fund and Toys for Children programs, sponsored by various Laboratory organizations, also help during the holiday season, as do Laboratory carpenters and quiltmakers who contribute handcrafts to charity.

In October 2003, Laboratory firefighters were on the front lines of wildfires that raged across southern California. The Laboratory dispatched two engines and two strike teams to provide assistance. As part of its mutual aid agreement to handle dispatch for Alameda County, the Laboratory sent a total of 21 engines and more than 70 firefighters from fire districts throughout the county.

**Part of the University of California**

Many mutually beneficial collaborations between the Laboratory and UC campuses serve to strengthen research programs at Livermore and provide the campuses access to Livermore's multidisciplinary capabilities and special research facilities. The Laboratory has especially strong ties with UC Davis dating from the



Laboratory employees generously support families in need with Brighter Holidays program.



Laboratory firefighters helped put out the southern California wildfires.





Director Michael Anastasio at the dedication of the Physical Biosciences Institute.



Laboratory and UC leaders dedicate the Edward Teller Education Center.

establishment of the Department of Applied Science campus at Livermore in 1965. Other major collaborations now include the Center for Biophotonic Science and Technologies (supported by the National Science Foundation) and the Integrated Cancer Center (designated a National Cancer Center by the National Cancer Institute). Both centers are housed at the UC Davis Medical Center in Sacramento. In September 2003, 40 UC Davis faculty and staff members visited the Laboratory to explore additional future collaborations. It was a full day of strategic planning, presentations by Laboratory researchers, and tours of facilities.

The Laboratory is also assisting in the establishment of UC Merced. The new university campus plans to have a close affiliation with Livermore, and its research will be aligned with the Laboratory's in a number of areas. Many additional research collaborations with UC campuses and other major universities are fostered by the Laboratory's six University Relations institutes. The newest, the Physical Biosciences Institute, opened its doors in March 2003 with seven postdoctoral fellows chosen from a large pool of applicants. The institute serves as an incubator for creating new research projects at the intersection of life sciences and other science and engineering disciplines.

### Partners in Educational Outreach

As part of the University of California and as a national laboratory, Livermore has a long-standing commitment to enhancing education at all levels, including community college and K-12. Community educational outreach projects typically engage over 10,000 students and teachers annually. Programs such as Fun with Science (a traveling science show) and Science on Saturday (a series of lectures and demonstrations) raise scientific awareness and seek to influence students to consider college education.

One highlight of the Laboratory's many teacher-development programs is the Edward Teller Education Center's Teacher Research Academy. The Edward Teller Education Center (ETEC), which serves as a focal point for teacher-development activities at the Laboratory, was dedicated in September 2003. The center is sponsored by the Laboratory, the UC Office of the President, UC Davis, and UC Merced. ETEC's Teacher Research Academy was launched in 2003 with 80 participating teachers. Teachers receive instructional materials and equipment for use in their classrooms in scientific theme areas that align with work at the Laboratory.

Another event is the Edward Teller Science and Technology Symposium. This two-day professional development program is for secondary science education and community college faculty. Each year, up to 150 teachers from throughout California participate in hands-on workshops where they learn to use new teaching materials that are based on Laboratory research.

### Helping California Track Groundwater Contamination

Livermore works with the State of California on issues ranging from homeland security (see p. 16) to water management. With a suite of analytical tools at their disposal, Laboratory scientists are developing a comprehensive picture of California's groundwater resources. They are determining where contamination has occurred, what the groundwater flow pattern is, and where the groundwater originates. Livermore is partnering with the California State Water Resources Control Board and the U.S. Geological Survey on the state-mandated Groundwater Ambient Monitoring and Assessment (GAMA) Program to investigate the degree to which the state's groundwater is susceptible to contamination.

Since the program began in 1999, 1,200 of the approximately 16,000 public drinking wells scattered throughout the state have been tested. The work begins with age-dating the water because age is a good indicator of probability of contamination. Younger water has been in the aquifer for a shorter time, so it has more recent contact with ground surfaces where contaminants are present. To determine how long water has been out of contact with the atmosphere, Livermore scientists use a capability available only in a handful of laboratories worldwide to determine within a few years when younger water entered the aquifer. The direction and rate that the groundwater in the aquifer is flowing can be inferred from these age determinations.

The data generated by the GAMA Program is maintained by the state in a geographic information system called GeoTracker. Developed by the Laboratory while an investigative team looked at leaking underground fuel tanks (LUFTs) and their effects on the state's groundwater, GeoTracker provides online access to data such as LUFT sites and all public well sites in California.



Livermore employees help local teachers develop computer skills.



The Del Valle Reservoir, near Livermore.

Award-Winning Science and Technology

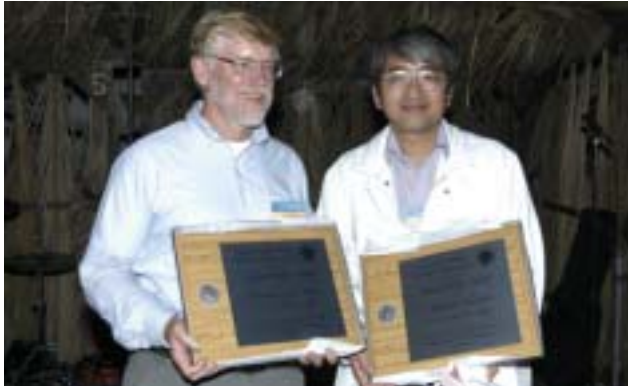
Each year, the scientific and technological accomplishments of Livermore employees are recognized outside the Laboratory by prizes, awards, and front-page publicity. Some of these achievements are described here. In addition, Laboratory scientists and engineers were responsible for 164 invention disclosures, 109 U.S. patent applications, 37 first foreign patent applications, 67 issued U.S. patents, and 19 issued foreign patents in FY 2003.



Edward Teller was awarded the Presidential Medal of Freedom, the nation's highest civilian honor, by President George W. Bush. Bush lauded Teller's pivotal role in ending the Cold War and for being a strong advocate for national defense and the cause of human freedom.

Seymour Sack, a Livermore physicist, earned an Enrico Fermi Award in 2003 "for his contributions to the national security of the United States." The Fermi Award was presented by DOE Secretary Spencer Abraham on behalf of the President.

Larry Suter was granted the American Nuclear Society's Edward Teller Award. The society recognized him as one of the world's leading experts on laser hohlraum physics and honored him for seminal work on almost all aspects of laser hohlraum physics.



Livermore's Suter (left) received the Edward Teller Award with Hideaki Takabe of Japan's Institute for Laser Engineering.



Each year, *R&D Magazine* selects the 100 most technologically significant new products and processes, ones that are the most beneficial to the world at large. The Laboratory has received 97 R&D 100 Awards, including six winners in 2003:

The High-Average-Power, Electro-Optic Q Switch, a device that allows fast optical switching for high-average-power lasers used in machining, energy research, and national defense.

The Biological Aerosol Sentry and Information System (BASIS) for the early detection of biological pathogens. Livermore and Los Alamos national laboratories shared this award.

The Lasershot™ Precision Metal Forming System for shaping large-panel structural components, such as those used in the aviation industry.

The Ion-Beam, Thin-Film Planarization Process, which helped solve one of the greatest technical challenges for advancing extreme ultraviolet lithography (EUVL).

The EUVL Full-Field Step-and-Scan System for printing 50-nanometer features on computer chips, almost twice as small as features possible with other systems. This award was given jointly to researchers from Lawrence Livermore, Lawrence Berkeley, and Sandia national laboratories as well as Northrop Grumman Space Technology/Cutting Edge Optonics.

The MEMS-based adaptive optics phoropter, a technology that combines advances in astronomy and micromachining to enhance vision and improve early diagnosis and treatment of retinal diseases. Livermore shared this award with Sandia National Laboratories, the University of Rochester, Wavefront Sciences, Boston Micromachines Corporation, and Bausch & Lomb.

Six Laboratory physicists were named Fellows of the American Physical Society:

John Castor was recognized for work on radiatively driven stellar winds and contributions to the theory of opacities, equations of state, and radiation hydrodynamics.

Giulia Galli (photo at right) was cited for her important contributions to the field of ab initio molecular dynamics and to the understanding of amorphous and liquid semiconductors and quantum systems.



Steven Hatchett was cited for contributions to theory and experiments of implosion physics for inertial confinement fusion and for innovative designs for fast ignition.

Richard Klein was selected for work on computational astrophysics including star formation, radiatively driven stellar winds, instabilities in supernovae and magnetized neutron stars, and scaled laser experiments simulating strong shock phenomena in the interstellar medium.

Christian Mailhoit was recognized for his contributions to theoretical and computational condensed matter and materials physics, with emphasis on innovative discoveries related to quantum-confined semiconductor structures and high-pressure research.

Erich Ormond was selected for his work in nuclear structure physics, including both ab initio shell-model and Monte Carlo calculations and nuclear physics as applied to stockpile stewardship.

The American Society for Precision Engineering honored optical physicist Gary Sommargren with a Lifetime Achievement Award, recognizing his contributions to the science of precision optical metrology.

Former Laboratory Director Bruce Tarter was elected a Fellow of the American Association for the Advancement of Science for transforming the science base for post-Cold War national security and for sustained contributions to national science policy.

Ed Moses, project manager of the National Ignition Facility, was honored with an NNSA Award of Excellence for his "vision, planning, and leadership" and "extraordinary record of sustained accomplishments."



Ed Moses (left) and Ambassador Linton Brooks, administrator of the National Nuclear Security Administration.

Siegfried Glenzer received the American Physical Society's 2003 Award for Excellence in Plasma Physics Research. The award recognized his contributions to understanding plasma waves, atomic physics, and hydrodynamics of hot dense plasmas. Glenzer was the first scientist to conduct experiments inside the National Ignition Facility's target chamber.

Jack Campbell was awarded the George W. Morey Award by the American Ceramics Society for his work and leadership in the development, characterization, and manufacturability of phosphate laser glass for high-peak-power lasers.

The Minerals, Metals & Materials Society named T. G. Nieh a Fellow of the society for his work on the superplasticity of metals and ceramics.





The American Society for Metals named John Elmer a Fellow in recognition of his innovative contributions to the development and application of synchrotron-based, in situ, spatially resolved x-ray diffraction techniques to the study of phase transformations during fusion welding.

Francois Heuze was elected vice president of the International Society for Rock Mechanics.

David Eaglesham was named vice president (president-elect) of the Materials Research Society.

Frank Robles received the Medalla de Oro from the Society of Mexican American Engineers for his efforts to increase the awareness of opportunities in science for minority youth and recruit students to work at the Laboratory. He was one of the three nation-wide recipients of the society's highest honor.



Two teams of scientists were awarded the 2003 Edward Teller Fellowships. Mike McCoy and Mark Seager were recognized for their work in developing some of the largest supercomputers in the world. Ben Santer and Ken Caldeira were cited for their work on modeling the effects of greenhouse gases on global climate change.

The Federal Laboratory Consortium for Technology Transfer granted the Extreme Ultraviolet Lithography (EUVL) project an Excellency in Technology Transfer Award for transferring to industry technology that will lead to more powerful microprocessors and memory chips with increased storage capacity. The EUVL team is made up of researchers from Lawrence Livermore, Lawrence Berkeley, and Sandia national laboratories.

The National Ignition Facility construction project won two national safety awards of excellence for its outstanding safety record. Jacobs Constructors, the NIF construction manager, received the prestigious Construction Industry Safety Excellence Award from the Construction Users Roundtable, an industry group dedicated to promoting cost-effective and safe construction methods. The National Safety Council honored NIF with its Perfect Year Award for the second year in a row.

The Environmental Protection Agency Region 9 honored the Laboratory and NNSA with two Champions of Green Government awards for pollution prevention projects: the Drain-Down Recovery Team for an approach to minimizing waste in drain and refill and the Photovoltaic (PV) Team for its work to promote PV use.

The U.S. Secretary of Health and Human Services honored Pedro Estacio and 23 other members of the Bioterrorism State and Local Preparedness Coordination Group with the Secretary's Award for Distinguished Service. Estacio serves as an adviser to the Secretary's Office of Public Health Emergency Preparedness.

A team of Laboratory scientists earned the Both Directions Award at the supercomputing conference SC2003 by winning the Bandwidth Challenge, a competition on the transfer of massive amounts of data.

Laboratory scientists Claire Max and Ellen Raber were two of nine inductees into the Alameda County Women's Hall of Fame in 2003 for their contributions in the fields of science and the environment, respectively.



Claire Max (left) and Ellen Raber.

*HPCwire*, the online magazine for high-performance computing in research laboratories, academia, and industry, named Ken Neves and Mark Seager to its list of Top People and Organizations to Watch in 2003.

Bob Shanilec of the Lawrence Livermore Television Network (LLTN) received the Crystal Award of Excellence from the Communicator Awards Video Competition while Donald Harrison, also of LLTN, earned an Award of Distinction from the same international competition. Shanilec also received an Aegis Award in a national competition for nonbroadcast organizations.



Bob Shanilec (left) and Donald Harrison.

Laboratory publications garnered three awards in the Society for Technical Communications International Competition.

The *Physics and Advanced Technologies 2001 Annual Report* (Gloria Cannon, Ralph Jacobs, and John Danielson) won a Distinguished Award.

*Science & Technology Review* magazine (Kim Budil, Louisa Cardoza, Arnie Heller, Amy Henke, Tom Isaacs, George Kitrinos, Kitty Madison, Ray Marazzi, Carolin Middleton, Ann Parker, Lew Reed, Katie Walter, Dean Wheatcraft, and Gloria Wilt) won an Excellence Award.

*Serving the Nation for Fifty Years—Fifty Years of Accomplishments* (Paul Chrzanowski, George Kitrinos, and Pam MacGregor) won an Excellence Award.



The *Science & Technology Review* team.

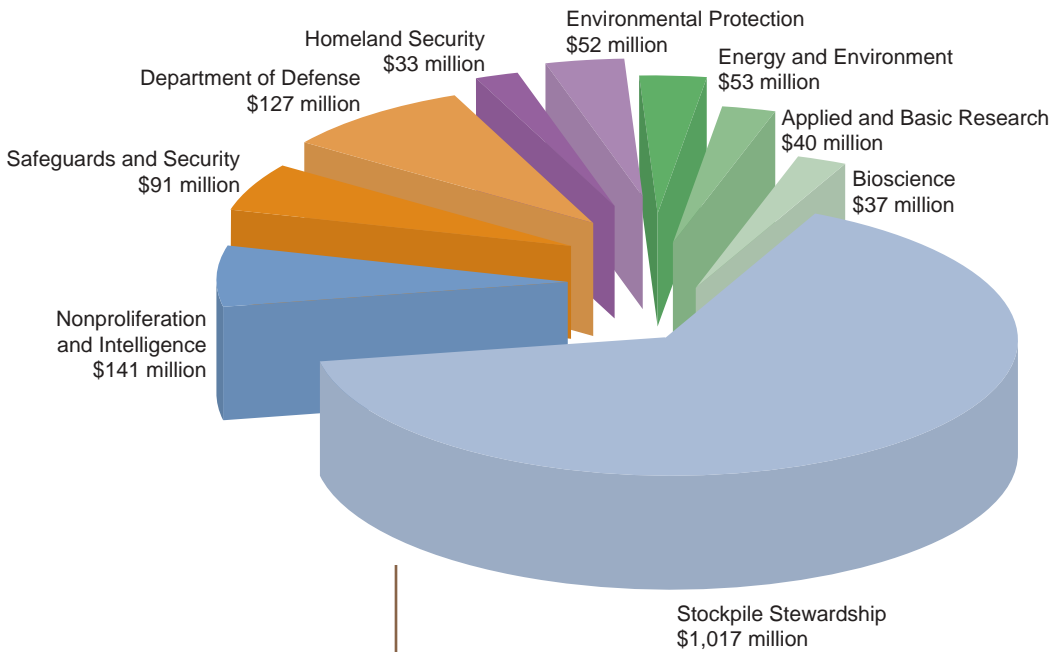


Laboratory Budget

Most of Livermore's \$1.6-billion budget for FY 2003 was designated for research and development activities in program areas supporting the Department of Energy's missions.

As a national security laboratory, Livermore is part of DOE's National Nuclear Security Administration (NNSA). The Laboratory's funding largely comes from the NNSA Office of Defense Programs for stockpile stewardship activities. Support for national security and homeland security work also comes from the NNSA Office of Defense Nuclear Nonproliferation, the Department of Homeland Security, various Department of Defense sponsors, and other federal agencies.

As a multiprogram laboratory, Livermore applies its special capabilities to meet important national needs. Activities include work for other DOE programs, principally Environmental Management and the Offices of Science, Civilian Radioactive Waste Management, Nuclear Energy, and Security and Emergency Operations. Non-DOE sponsors include federal agencies (such as the National Aeronautics and Space Administration, Nuclear Regulatory Commission, National Institutes of Health, and Environmental Protection Agency), State of California agencies, and industry.



Laboratory Values

The Laboratory's programmatic achievements and safe, secure, and efficient operations would not be possible without the dedicated efforts of all employees. Livermore seeks a highly talented, motivated staff that is committed to the Laboratory's values and is reflective of the diversity of California and the nation. We strive for a work environment in which all employees can contribute to their fullest.

Find Out More about Us

Visit the Laboratory's frequently updated Web site at <http://www.llnl.gov/> to learn more about our many scientific and technical programs. Discover the many opportunities for employment, academic research, and industrial partnerships. Read about our accomplishments each month in *Science & Technology Review* in print or the Web at <http://www.llnl.gov/str/>.



# We value

- Passion for Mission
- Integrity and responsible stewardship of the public trust
- Simultaneous excellence in science & technology, operations, and business practices
- Balancing innovation with disciplined execution
- Teamwork while preserving individual initiative
- Intense competition of ideas with respect for individuals
- Treating each other with dignity
- A high-quality, motivated workforce with diverse ideas, skills, and backgrounds
- Rewarding and recognizing performance
- Commitment to the collective success of the Laboratory



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